

*REMARKS/ARGUMENTS**The Pending Claims*

Claims 1-36 currently are pending. Claims 13-36 have been withdrawn pursuant to a restriction requirement. Claims 1-12 currently are being examined and are drawn to a cosmetic composition comprising fumed alumina particles. Reconsideration of the claims is respectfully requested in view of the remarks herein.

*Discussion of the Amendments to the Specification*

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. Accordingly, as indicated in Applicants' Reply to Office Action, filed November 21, 2007, paragraphs 0016, 0025, 0027, 0032, and 0036 of the specification were amended to correct typographical errors. No new matter was added by way of these amendments.

*Discussion of the Restriction Requirement*

Applicants acknowledge that a complete reply to the final Office Action must include cancellation of nonelected claims or other appropriate action. Applicants maintain the request for rejoinder of any non-examined claims upon an indication of the allowability of any of the examined claims to the extent such non-examined claims are dependent upon, or include the limitations of, any of the allowed claims.

*Summary of the Office Action*

The Office Action sets forth the following rejections:

(a) claims 1-36 stand provisionally rejected based on statutory-type double patenting under 35 U.S.C. § 101 as allegedly claiming the same invention as that of claims 1-12, 14-25, and 27-38 of co-pending U.S. Patent Application 10/959,614, which has not yet issued;

(b) claims 1-6, 8, and 9 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent 3,981,988 (Newman et al.) (hereinafter "the Newman '988 patent");

(c) claims 7 and 10-12 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious over the Newman '988 patent alone or in view of U.S. Patent Application Publication 2003/0064020 (Kogoi et al.) (hereinafter "the Kogoi '020 publication");

(d) claims 1-12 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious over International Patent Application Publication WO 02/056846 (Tan et al.) (hereinafter "the Tan '846 publication") in view of the Kogoi '020 publication.

#### *Discussion of the Double-Patenting Rejection*

Applicants acknowledge that claims 1-12 are provisionally rejected as allegedly claiming the same invention as that of claims 1-12, 14-25, and 27-38 of co-pending U.S. Patent Application 10/959,614. Applicants appreciate that the Office will continue to note this "provisional" rejection until it is the only rejection remaining against either the pending application or against U.S. Patent Application 10/959,614. Applicants will address this rejection if and when the referenced application issues as a patent and the rejection is no longer provisional.

#### *Discussion of the Anticipation Rejection*

The Office Action rejects claims 1-6, 8, and 9 as allegedly anticipated by the Newman '988 patent. Claim 1 of the pending application requires a cosmetic composition comprising about 3 wt.% or more fumed alumina particles. Pending claims 2-6, 8, and 9 depend upon claim 1 and, therefore, incorporate all of the limitations of claim 1.

The Office Action asserts that the Newman '988 patent discloses a composition comprising between 0.1-40 wt.% fumed alumina particles having a primary particle size between 10 and 100 millimicrons (i.e., between 10 and 100 nm). However, the Newman '988 patent only generally discloses fumed alumina for use as a lustre-imparting agent. In particular, the Newman '988 patent provides that fumed alumina, when used in combination with known abrasive cleaning agents in toothpastes, enhances the lustre of teeth.

However, the Newman '988 patent does not disclose any uses of fumed alumina outside of cleaning teeth, let alone its use as a component of a cosmetic composition. The

preamble of each of the pending claims, by contrast, indicates that the claims are directed specifically to a “cosmetic composition.”

“If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is ‘necessary to give life, meaning, and vitality’ to the claim, then the claim preamble should be construed as if in the balance of the claim.” *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 U.S.P.Q.2d 1161, 1165-66 (Fed. Cir. 1999); see also Manual of Patent Examining Procedure (“MPEP”) § 2111.02. Thus, “[t]he effect preamble language should be given can be resolved only on review of the entirety of the patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim.” *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 U.S.P.Q.2d 1962, 1966 (Fed. Cir. 1989).

In *Corning Glass*, for example, the Federal Circuit concluded that the claim preamble provided an additional positive limitation to the claims because: “the [ ] specification makes clear that the inventors were working on the particular problem of an effective optical communication system [and] not on general improvements in conventional optical fibers. To read the claim in light of the specification indiscriminately to cover all types of optical fibers would be divorced from reality.” *Corning Glass*, 868 F.2d at 1257, 9 U.S.P.Q.2d at 1966. Similarly, in *Kropa v. Robie*, claims directed to an “abrasive article” comprising abrasive grains and a binder were limited by the preamble because “it is only by that phrase that it can be known that the subject matter defined by the claims is comprised as an abrasive article. Every union of substances capable *inter alia* of use as abrasive grains and a binder is not an ‘abrasive article.’” *Kropa v. Robie*, 187 F.2d 150, 152, 88 U.S.P.Q. 478, 481 (C.C.P.A. 1951).

Like all other claim limitations, a preamble that limits the scope of a claim must be disclosed in a prior art reference for that reference to anticipate the claimed subject matter. In *re Stencel*, for example, the Federal Circuit held that the collar structure of a claimed driver, which was recited only in the preamble of the claims, limited the scope of the claims, and, as such, limited the scope of the relevant prior art: “[t]he framework – the teachings of the prior art – against which patentability is measured is not all drivers broadly, but drivers suitable for use in combination with this collar, for the claims themselves are so limited.” *In re Stencel*, 828 F.2d 751, 754, 4 U.S.P.Q.2d 1071, 1073 (Fed. Cir. 1987).

In this case, the entirety of the specification accompanying the pending claims indicates that the invention is directed to the use of fumed alumina in cosmetic compositions (see, e.g., “Field of the Invention,” paragraphs 0005, 0016, 0019, 0025). The invention is directed not to the use of about 3 wt.% or more fumed alumina particles in any composition generally, but specifically to the use of about 3 wt.% or more fumed alumina particles in a *cosmetic* composition. As was the case in *Kropa v. Robie*, “it is only by that phrase [e.g., “cosmetic composition”] that it can be known that the subject matter defined by the claims is comprised as [a cosmetic composition].” See *Kropa*, 187 F.2d at 152, 88 U.S.P.Q. at 481. Thus, the preamble of the pending claims, which requires that the composition be a “cosmetic composition,” provides an additional positive claim limitation that must be met by any prior art reference alleged to anticipate those claims.

Because the Newman ‘988 patent fails to disclose a cosmetic composition comprising fumed alumina in any amount, let alone in an amount of about 3 wt.% or more, the Newman ‘988 patent does not disclose the subject matter of the pending claims.

Moreover, the Newman ‘988 patent does not disclose the aggregate or agglomerate particle size of the fumed alumina particles, as required, for example, by pending claims 5, 6, 8, and 9. The Office Action alleges that, because the Newman ‘988 patent discloses fumed alumina particles having a primary particle size from 10-100 millimicrons (i.e., from 10-100 nm), which primary particles form aggregates (see col. 1, lines 35-40), the Newman ‘988 patent inherently discloses aggregates exhibiting the particle sizes recited in the pending claims. Contrary to the Office Action’s assertions, however, the Newman ‘988 patent discloses nothing with respect to the aggregate particle size (see col. 1, lines 35-40), and the claimed aggregate particle sizes will not necessarily result from the primary fumed alumina particles disclosed by the Newman ‘988 patent. Moreover, the Newman ‘988 patent does not provide any disclosure regarding the formation of agglomerates of fumed alumina, let alone agglomerates exhibiting the particle sizes required by pending claims 8 and 9. In other words, the primary particle size is independent of both the aggregate particle size and the agglomerate particle size. Accordingly, it cannot be presumed that the Newman ‘988 patent inherently discloses the subject matter of pending claim 5, 6, 8, or 9.

Because the Newman '988 patent does not disclose the subject matter of any of the pending claims, Applicants respectfully submit that the anticipation rejection of claims 1-6, 8 and 9 based on the Newman '988 patent is improper and should be withdrawn.

#### *Discussion of the Obviousness Rejections*

For subject matter defined by a claim to be considered obvious, the Office must demonstrate that the differences between the claimed subject matter and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a); see also *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). The ultimate determination of whether an invention is or is not obvious is based on certain factual inquiries including: (1) the scope and content of the prior art, (2) the level of ordinary skill in the prior art, (3) the differences between the claimed invention and the prior art, and (4) objective evidence of nonobviousness. *Graham*, 383 U.S. at 17-18, 148 U.S.P.Q. at 467.

Each of the obviousness rejections is separately discussed below.

#### *A. The Newman '988 Patent*

The Office Action rejects claims 7 and 10-12 as allegedly encompassing obvious subject matter over the Newman '988 patent alone or in view of the Kogoi '020 publication. Claims 7 and 10-12 of the pending application depend from, and therefore incorporate all of the limitations of, claim 1, which is discussed above in connection with the anticipation rejection.

The Office Action acknowledges that the Newman '988 patent does not teach the particle size distribution or specific crystalline content of the aggregate alumina particles, but relies on *In re Aller*, 105 U.S.P.Q. 233 (C.C.P.A. 1955), for its suggestion that if the general conditions of a claim are disclosed in the prior art, discovering the optimum ranges involves only routine skill in the art. The Office Action essentially asserts, therefore, that a person of ordinary skill in the art, upon considering the disclosure of the Newman '988 patent, would "optimize" the size distribution of aggregate alumina particles and the alumina crystalline phases, thereby arriving at the subject matter of the pending claims.

Contrary to the Office Action's assertions, however, the Newman '988 patent discloses nothing with respect to the use of fumed alumina particles – of any aggregate size, agglomerate size, or particular crystalline content – in cosmetic compositions, and *In re Aller* is therefore inapposite. The claims at issue in *In re Aller* were directed to a particular reaction process carried out at a certain temperature and in the presence of a certain amount of acid. *In re Aller*, 105 U.S.P.Q. at 234. The prior art disclosed the same reaction process, carried out at higher temperature and lower acid concentration. *Id.* Because the prior art disclosed the “general conditions” of the claims, the Court held that “any chemist ... by experimentally varying the conditions of temperature and acidity could find the most productive conditions.” *In re Aller*, 105 U.S.P.Q. at 237.

In the present case, by contrast, the Newman '988 patent, which is directed to the use of fumed alumina to improve the lustre of teeth, discloses only generally that primary particles of alumina form aggregates – no particular aggregate particle size or particle size distribution is disclosed – and that the particles disclosed are “predominately” gamma crystalline particles (col. 1, lines 35-41). The Newman '988 patent provides no teaching whatsoever with respect to fumed alumina particles for use in cosmetic compositions, nor does it address the soft-focus benefits provided by the use of fumed alumina in such compositions, in any amount, particle size, or crystalline type. As such, a person of ordinary skill in the art, on considering the teachings of the Newman '988 patent, would not reasonably be expected to “optimize” anything in its disclosure to arrive at the claimed invention.

Accordingly, contrary to the Office Action's assertions, the Newman '988 patent does not provide any teaching – express or implied – to lead a person of ordinary skill in the art to arrive at the subject matter of any of pending claims 7 and 10-12.

The Kogoi '020 publication fails to cure the deficiencies of the Newman '988 patent. In particular, the Kogoi '020 publication is directed to fumed alumina that exhibits a particular average primary and secondary, i.e., aggregate, particle diameter, as well as a process for its production (see, e.g., paragraphs 0011-0023). The Kogoi '020 publication further discloses an end-use of these fumed alumina particles in chemical-mechanical polishing (“CMP”) applications (see, e.g., paragraphs 0009, 0029-0030). Specifically, the Kogoi '020 publication discloses that fumed alumina particles exhibiting these particle

diameters exhibit improved abrasive properties in polishing applications, while simultaneously reducing scratching because of a reduced amount of coarse particles (see, e.g., paragraphs 0008-0009). The Kogoi '020 publication is not directed to cosmetic compositions, let alone those comprising any particular weight percent of fumed alumina. While the Kogoi '020 publication makes a singular, generic reference to cosmetic compositions, stating that "the alumina particles can be used for not only the CMP application, but also the cosmetics application where scrubbing and smooth feeling both are desired" (paragraph 0079), nothing in the Kogoi '020 publication discloses the particular soft-focus benefits provided by the use of fumed alumina, nor any particular amount of fumed alumina in cosmetic compositions to achieve such benefits.

Thus, neither the Newman '988 patent nor the Kogoi '020 publication discloses or suggests the use of 3 wt.% fumed alumina particles in a cosmetic composition. Accordingly, the subject matter of the pending claims cannot properly be considered obvious over the cited references, and the obviousness rejection should be withdrawn.

Because claim 1 of the pending application is therefore believed to be allowable over the disclosure of the combination of the Newman '988 patent and the Kogoi '020 publication, all claims dependent upon claim 1, e.g., rejected claims 7 and 10-12, are also believed to be allowable. Nonetheless, Applicants note that the Office Action alleges that the Kogoi '020 publication's disclosure of primary particles having an average diameter between 5 and 100 nm, and aggregated particles having an average diameter between 50 and 800 nm (see paragraphs 0012, 0013, and 0029), satisfies the claimed average aggregate particle sizes of "about 50 nm or more" (see pending claim 5) and "about 300 nm or less" (see pending claim 7), as well as the claimed average agglomerate particle sizes of "about 30  $\mu$ m or less" (see pending claims 9 and 11). Contrary to the Office Action's assertions, however, the disclosure of the Kogoi '020 publication with respect to a general range of average aggregate particle size, i.e., between 50 and 800 nm, teaches nothing with respect to the particular average aggregate particle size required by the pending claims, i.e., 300 nm or less, nor with respect to the particle size distribution required by the pending claims, i.e., 70 wt.% or more of the particles having an average aggregate particle size of 300 nm or less. Even assuming, as the Office Action asserts, that one of ordinary skill in the art "would have reasonably expected" that the teachings of the Kogoi '020 publication would produce "a normal distribution of

particle sizes,” a “normal” distribution of aggregate particles that average between 50 and 800 nm in size, as disclosed by the Kogoi ‘020 publication, does not necessarily result in about 70 wt.% or more of the aggregate particles having a particle size of 300 nm or less, let alone 70 wt.% or more of the particles having an agglomerate particle size of 5  $\mu\text{m}$  or more or 30  $\mu\text{m}$  or less. In fact, the Kogoi ‘020 publication discloses nothing with respect to the agglomerate particle size whatsoever, let alone with respect to the optimum aggregate or agglomerate particle size or particle size distribution for cosmetic applications specifically.

The Office Action further alleges that the Kogoi ‘020 publication’s disclosure with respect to the crystalline form of the particles, i.e., that the particles are of a “mixed” crystalline form, satisfies the requirements of pending claim 12, which requires that the particles comprise a combined  $\delta^*$ -phase and  $\theta$ -phase crystalline alumina content of about 30% or more. The Kogoi ‘020 publication, however, discloses fumed alumina that “can be amorphous or have any of the crystalline forms, for example,  $\gamma$ -form,  $\delta$ -form, and  $\theta$ -form” (paragraph 0028; see also paragraph 0046). Thus, contrary to the Office Action’s assertions, the particles of the Kogoi ‘020 publication can include, for example, non-crystalline amorphous particles, such that the Kogoi ‘020 publication certainly does not indicate that the particles comprise a combined  $\delta^*$ -phase and  $\theta$ -phase crystalline alumina content of about 30% or more.

The combination of the Newman ‘988 patent and the Kogoi ‘020 publication fails to disclose or suggest the subject matter of the pending claims. In particular, the combination fails to disclose or suggest a cosmetic composition comprising 3 wt.% or more fumed alumina particles. Accordingly, the subject matter of the pending claims cannot properly be considered obvious over the cited references, and Applicants respectfully submit that the obviousness rejection of claims 7 and 10-12 should be withdrawn.

*B. The Tan ‘846 Publication*

The Office Action rejects claims 1-12 as allegedly encompassing obvious subject matter over the Tan ‘846 publication in view of the Kogoi ‘020 publication. Claims 2-12 of the pending application depend from, and therefore incorporate all of the limitations of, claim 1, which is discussed above in connection with the anticipation rejection.



The Office Action acknowledges that the Tan '846 publication teaches neither the formation of aggregate alumina particles nor the particle size, particle size distribution, or crystalline content of such aggregate or agglomerate fumed alumina particles. What the Office Action does not recognize, however, is that the Tan '846 publication fails to disclose or suggest the use of fumed alumina particles in cosmetic compositions whatsoever. The Tan '846 publication discloses the use of a "combination of pigments" (p. 3, lines 20, 30) to provide a soft-focus effect in cosmetic compositions (see, e.g., p. 2, lines 6-23; p. 3, lines 33-35). In particular, the Tan '846 publication discloses the combination of a first platelet of alumina treated with a metal oxide and a second platelet treated with a spherical scattering component (see, e.g., p. 3, lines 30-35), which combination allows for the production of cosmetic compositions that are "substantially free of metal oxides" (see, e.g., p. 3, line 13). More specifically, "[t]he alumina platelet is a planar mirrored particle" (p. 4, lines 24-25) that is treated with a metal oxide, such as, for example, iron oxide (p. 4, lines 19-21). Thus, the Tan '846 publication fails to disclose a cosmetic composition comprising fumed alumina in any amount, let alone in an amount of about 3 wt.% or more.

The Kogoi '020 publication fails to cure the deficiencies of the Tan '846 publication. As discussed above, the Kogoi '020 publication does not disclose or suggest a cosmetic composition comprising about 3 wt.% or more fumed alumina particles. As such, the combination of the Tan '846 publication and the Kogoi '020 publication fails to disclose or suggest the subject matter of the pending claims. For this reason alone, the subject matter of the pending claims cannot properly be considered obvious over the cited references, and the obviousness rejection should be withdrawn.

Furthermore, contrary to the Office Action's assertions, a person of ordinary skill in the art would not have been motivated to modify or combine the disclosures of the Kogoi '020 publication and the Tan '846 publication, which disclose the use of different types of alumina in different end-use applications. The Kogoi '020 publication is directed to controlling the average particle diameter of fumed alumina, and the use of these particles to produce specific advantages in CMP applications (see, e.g., paragraphs 0009, 0029-0030). The Tan '846 publication, on the other hand, while directed to cosmetic compositions generally, requires treated alumina platelets as pigments, and distinguishes cosmetic compositions comprising metal oxides in any form (see p. 6, lines 20-35), emphasizing that

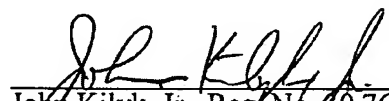
"the compositions of the present invention are substantially free of metal oxides" (p. 6, line 22). Thus, the Tan '846 publication actually teaches away from the use of all metal oxides, including fumed alumina, to provide a soft-focus effect. Therefore, there is nothing to motivate a person of ordinary skill in the art to combine the teachings of the Kogoi '020 publication with the teachings of the Tan '846 publication, let alone in the manner necessary to arrive at the present invention.

In view of the foregoing, the combination of the Tan '846 publication and the Kogoi '020 publication fails to disclose or suggest the subject matter of the pending claims. Moreover, the cited references fail to provide a teaching or suggestion that would have motivated one of ordinary skill to modify or combine the disclosures of the cited references in the manner necessary to arrive at the present invention. For either reason, the subject matter of the pending claims cannot properly be considered obvious over the cited references, and the obviousness rejection of claims 1-12 should be withdrawn.

#### *Conclusion*

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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